

Kansas Department of Health and Environment  
Bureau of Waste Management Policy 05-02

related to

Electronic Waste Management in Kansas Landfills

May 31, 2005

**Background**

Electronics waste (E-waste) includes all types of obsolete, unused, or unwanted electronic equipment. Personal computers (PCs), consisting of central processing units (CPUs), monitors (CRTs), keyboards, and miscellaneous peripheral items, comprise the largest volume of E-waste. The presence of lead in the monitor glass has caused some states and the U.S. EPA to express concerns about disposal in non-hazardous waste landfills. E-waste also includes a wide range of other items such as televisions, video cassette recorders (VCRs), stereos, radios, personal digital assistants (PDAs), cell phones, electronic games, and digital versatile disk (DVD) players. It is estimated that Kansans will generate 500,000 to 1,000,000 unwanted PCs each year, plus a whole array of other E-wastes.

Kansas laws and regulations do not specifically address E-waste disposal. State and federal solid and hazardous waste regulations are applicable to any waste; however, it is difficult to determine if various E-waste components are characteristic hazardous wastes due to the presence of heavy metals. Some test results from other states indicate that certain processed and segregated components, such as the glass making up the neck of monitors, may fail the TCLP toxicity test for lead. However, questions have been raised regarding the legality of the test methods which may not have evaluated the entire waste, but only the portion containing the lead.

Attempts to regulate E-waste disposal is further complicated by the fact that E-waste is universally generated by businesses, institutions and households. Households and small quantity generators of hazardous waste are not subject to the same rules as businesses that generate more than 25 kg of hazardous waste per month (i.e., Kansas and EPA generators). If KDHE applied hazardous waste rules to E-waste, those rules would only address a portion of the waste. There would also be uncertainty as to which E-waste should be counted when determining the weight of regulated waste.

Options to recycle E-waste in Kansas are growing, but still limited. E-waste recycling services are not available in most small and medium-sized communities. If a statewide requirement to recycle E-waste became effective in 2005, many generators would find it confusing and costly to arrange for proper waste management. A landfill ban could result in significant open dumping because of the lack of services and costs.

E-waste management was identified as the most important emerging solid waste issue in Kansas by a group of solid waste stakeholders. KDHE will facilitate a meeting of a newly formed E-

waste Task Force to review policy options for Kansas. This task force will begin its work on June 9, 2005 with the goal of making policy recommendations to KDHE that may result in the development of statutory initiatives, administrative regulations, or department guidance.

### **Purpose**

This Bureau of Waste Management policy was developed to inform the public about allowable and preferred E-waste management methods. It also provides guidance to businesses or local governments that may become involved in E-waste recycling. This policy will remain in effect until the work of the E-waste task force is complete and an alternate state policy is adopted and/or new federal regulations governing E-waste management are promulgated.

### **E-Waste Management Options**

Until this policy is revoked, E-waste may be landfilled in Kansas permitted municipal solid waste (MSW) landfills, all of which have groundwater monitoring programs. KDHE has determined that the potential presence of elevated lead in the glass of computer monitors poses a very low risk to human health and the environment. E-waste generators are not required to test this waste as part of their standard waste characterization practices.

Despite this approval to landfill E-waste, it is not the preferred management method. E-waste comprises a significant portion of the MSW stream and it is growing rapidly. Landfill space is valuable and it is beneficial to all Kansans to divert as much of this high volume waste into recycling markets as practical. For this reason, KDHE will support the development of E-waste recycling and encourage Kansans to recycle rather than dispose of these wastes.

### **Rules Applicable to E-Waste Recycling**

E-waste that has been segregated from other solid waste for the purpose of recycling is classified as a “recyclable” according to state laws and regulations. This designation applies to E-waste that is only collected, stored, and transported. Any facility that processes E-waste by grinding, crushing, or other chemical or mechanical methods is classified as a “reclamation facility” which is a form of “solid waste processing facility.” Facilities that repair consumer electronics for reuse are not considered solid waste processing facilities. State law requires every solid waste processing facility to obtain a permit from KDHE. A condition of every permit is the requirement to demonstrate financial assurance, meaning funds are available for a third party to remove the waste materials from the site if the permittee should ever go out of business. The fee to obtain a reclamation facility permit from KDHE is \$250. An application to obtain a processing facility permit can be found on-line at [www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste).

Companies that recycle E-waste should contact KDHE regardless of whether they require a solid waste processing facility permit. KDHE will add company information into our statewide, regional, and national recycling directories.

### **KDHE Contacts**

To get listed in a Kansas E-waste directory contact: *Kent Foerster*, [kfoerste@kdhe.state.ks.us](mailto:kfoerste@kdhe.state.ks.us)  
*phone: (785)296-1540.*

To receive information about applying for a permit contact: *Joe Cronin*,  
[jcronin@kdhe.state.ks.us](mailto:jcronin@kdhe.state.ks.us) *phone: (785) 296-1667*

To ask questions regarding this policy contact: *Bill Bider*, [wbider@kdhe.state.ks.us](mailto:wbider@kdhe.state.ks.us)  
*phone: (785) 296-1612*

### **E-Waste Resources and Links**

#### **Kansas Recycling Directory**

[www.kansasbirp.com](http://www.kansasbirp.com) and [www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste)

#### **National Electronics Recycling Directories:**

International Association of Electronic Recyclers <http://www.iaer.org/search/>  
National Safety Council <http://www.nsc.org/ehc/epr2/recycler.HTM>  
Electronic Industries Alliance <http://www.eiae.org/>

#### **Other Reference materials:**

Mid America Council of Recycling and Economic Development Officials (MACREDO)  
<http://www.libertynet.org/macredo/comelc.htm>

#### **North East Recycling Coalition (NERC)**

<http://www.nerc.org/adobe/NebraskaToolkitSection-III.pdf>

#### **Nebraska How to Set Up Recycling Program**

<http://www.nerc.org/adobe/NebraskaToolkitSection-I.pdf>

#### **National Recycling Coalition, Inc. (NRC)**

No Computer Should Go To Waste initiative with Dell

<http://www.nrc-recycle.org/partnerships/dell/index.htm>

Recycling and Database Initiative

<http://www.nrc-recycle.org/resources/electronics/index.htm>

#### **Trade Journals**

E-ScrapNews

<http://www.resource-recycling.com/esn.html>

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William L. Bider  
Director, Bureau of Waste Management

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